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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,237	11/25/2003	Takashi Shibuya	03500.017737	4343
5514	7590	11/10/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			GLEITZ, RYAN M	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/720,237		SHIBUYA ET AL.	
	Examiner		Art Unit	
	Ryan Gleitz		2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 10-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 and 31-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 10-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10 June 2005.

Claim Objections

Claim 6 and 31 are objected to because they are duplicates. Applicant has written claim 31 to include the previously indicated allowable subject matter of claim 6, but has not changed the scope of either of the claims. Either claim 6 or claim 31 should be amended or canceled to overcome this objection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (JP 2002-351269) in view of Kaga (JP 2003-107922).

Saito et al. disclose an image forming apparatus including an endless intermediate transfer belt (6) as image bearing member for bearing a toner image and optical detection device (10) including a light-emitting portion (41) and light-receiving portion (42); wherein a light emitted from the light-emitting portion (41) is reflected by the image bearing member (6) and is

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received by the light-receiving portion (42); and an optical direction from the light-emitting portion (41) to the light-receiving portion (42).

The optical detection device (10) detects a toner density on the image bearing member.

Abstract, line 12.

The optical detection device (10) detects a mark on the image bearing member. Abstract, line 14.

A support member (6a) is for supporting the belt, wherein the optical detection device (10) is opposed to the support member across the belt (6).

An image forming condition for forming a toner image is controlled according an output of the optical detection device (10). Abstract, lines 14-16.

Saito et al. is silent as to the glossiness of belt (6).

However, Kaga disclose a similar endless belt having a first glossiness in a first direction, perpendicular to a moving direction of the belt, and a second glossiness in a second direction lower than the first glossiness to provide a conductive endless belt having excellent strength, especially excellent bending durability, creeping resistance and further dimensional stability. Abstract, lines 1-15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image forming apparatus of Saito et al. with the glossinesses of the belt as taught by Kaga so that the balance of the kinetic property of the direction of a driving shaft of a belt and the transit direction can be optimized, and the conductive endless belt equipped with good crookedness endurance and creep resistance can be realized. See translation, [0031].

Allowable Subject Matter

Claims 31-39 are allowed.

Claims 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 16 September 2005 (Response) have been fully considered but they are not persuasive.

Applicant asserts that Kaga discloses a glossiness G_V of an endless belt in the direction of the driving axis and a glossiness G_H in the direction of the belt's movement, and although the glossiness in one direction may be greater than the glossiness in the second direction, nothing in Kaga suggests that the optical direction should be the same as the direction of the higher glossiness of the belt. See Response, p. 12-13.

Saito et al. disclose an optical direction from a light emitting portion to a light receiving portion in figure 2. Saito et al. is not clear if this direction is in the direction of the driving axis or in the direction of the belt's movement.

On one hand, if the optical direction in Saito et al. is in the direction of the driving axis, the relationship taught by Kaga, $0.5 < G_V / G_H < 2.0$, is satisfied by $G_V = 2$ and $G_H = 1$. In this case, the first direction, G_V , equals 2, and is both greater than G_H and in the same direction as the optical direction of Saito et al.

On the other hand, if the optical direction in Saito et al. is in the direction of the belt's movement, the relationship taught by Kaga, $0.5 < G_V / G_H < 2.0$, is satisfied by $G_V = 1$ and $G_H = 2$.

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In this case, the first direction, G_H , equals 2, and is both greater than G_V and in the same direction as the optical direction of Saito et al.

Therefore, regardless of the optical direction used by Saito et al. between the light emitting portion to a light receiving portion, Kaga teaches a glossiness arrangement for the belt that meets every limitation of claim 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

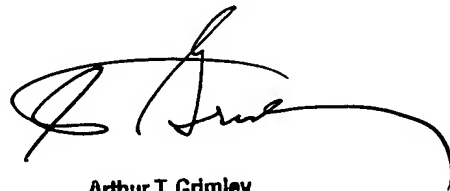
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rg



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